

FROYSHTETER, G.B.[Froishteter, H.B.], kand. tekhn. nauk;
YAMPOL'SKIY, N.G.[Iampol's'kiy, N.H.], kand. tekhn. nauk

Burning of lumpy brown coal and milled peat in the furnaces
of small boilers. Kompl. vyk. pal.-energ. res. Ukr. no.1:
308-324 '59. (MIRA 16:7)

1. Nauchno-issledovatel'skiy institut mestnoy i toplivnoy
promyshlennosti Gosplana UkrSSR.
(Boilers)

SOV/96-59-5-9/19

AUTHOR: Froyshteter, G.B., Candidate of Technical Sciences

TITLE: Determining the Resistance of a Burning Layer of Fuel
(K Voprosu ob opredelenii soprotivleniya goryashchego
sloya topliva)

PERIODICAL: Teploenergetika, 1959, Nr 5: pp 50-55 (USSR)

ABSTRACT: The aero-dynamic properties of cold layers of fuel have been extensively studied but little work has been done on burning layers of fuel. The test rig illustrated diagrammatically in Fig 1 was set up to make such a study. The fuel burned in a cylindrical furnace of 250 mm diameter; during the experiments the height of the fuel layer was maintained constant and equal to the height of the oxygen zone, which was determined in advance for each type of fuel. The methods of making the various measurements are explained. The fuels used in the tests were "thermo-anthracite" and coke with four sets of particle sizes ranging between 15 to 25 mm and 5 to 7 mm. The main difference between the fuels lay in the ash content and the ash melting-point. Special tests

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showed that the anthracite ash had practically no

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influence on the aerodynamics of the layer but when coke was burned a slag layer formed, complicating the conduct of the experiments. The ideal theoretical case of burning a layer of particles of uniform size is considered. In particular, formula (5), for the fractional composition of the burning layer, is compared with the experimental curves in Fig 2. Agreement is good, indicating that the relationships used in deriving expression (5) are valid. Experimental data on the porosity of the burning layer for various fractions and conditions are tabulated in comparison with analogous data for a cold layer. It will be seen that the porosity is practically the same in the two cases. An analytical solution of the resistance of a burning layer is based on experimental data about particle size distribution in the height of the layer and the temperature distribution of the gas flow in the layer. The assumptions that are made in the calculations are explained and expression (6) is derived for the resistance factor of the burning layer.

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This factor is plotted as function of the Reynolds number

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in Fig 3, on which experimental results are also plotted. The agreement must be considered satisfactory in view of the complexity of the combustion process in the layer. Graphical comparison of the resistance function for hot and cold layers in Fig 3 shows that the equations are similar in the two cases but the numerical coefficients differ. Therefore, experimental data obtained in a cold layer can be used to determine the nature of the relationship between the resistance and the Reynolds number in a hot layer. However, the actual values of resistance factors for hot and cold layers are very different, mainly because of the differences in the temperature conditions and changes in layer structure. Results derived from representing the same process by a model in which sodium chloride is dissolved in water are very briefly mentioned. A practical formula for calculation of the resistance of the burning layer based on the theoretical analysis and the test data is offered as Eq (7). Here all the terms are known from the initial

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condition except the resistance factor term, which is given by expression (8). The accuracy of the proposed method of determining the resistance of a burning layer may be judged from Fig 4, where the theoretical curve is compared with experimental data obtained in 58 tests. In 75% of the cases the error is not greater than 10% and the mean square error is 8.78%. The formulae given are valid if the height of the burning layer does not exceed the height of the oxygen zone: they are only approximately valid for the reducing zone. If a reducing zone is present, the mean temperature should be determined for each zone separately and a mean value determined for the entire layer, making allowance for the height of each zone. There are 4 figures and 5 references, 4 of which are Soviet and 1 English.

ASSOCIATION: NII mestnoy i toplivnoy promyshlennosti Gosplana USSR
(Scientific Research Institute of Local and Fuel Industry
GOSPLAN UkrSSR)

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FROYSHTETER, G.B.

Methods for judging the operational efficiency of feed mechanisms
in furnaces with overfeed stoking and stationary grates. Inzh.-
fiz.shur. no.1:49-54 Ja '60. (MIRA 13:4)

1. Institut mestnoy i toplivnoy promyshlennosti Gosplana USSR,
Kiyev.

(Furnaces)

FROYSHETER, G.B., kand.tekhn.nauk

Competitive value of peat briquets under conditions prevailing
in the Ukraine. Torf. prom. 37 no. 3:19-22 '60. (MIRA 14:1)

1. Nauchno-issledovatel'skiy institut mestnoy i toplivnoy
promyshlennosti Gosplana USSR.
(Ukraine—Peat) (Ukraine—Fuel)

FROISHTETER, G.B.

"Briquetting peat" by M.G.Bulyuko, V.N.Ivanov, M.I.Sarmatov.
Reviewed by G.B.Froishteter. Torf. prom. 39 no.8:36-37 '62.
(MIRA 16:1)

(Peat) (Briquets (Fuel))

FROYSHETER, G.B., kand.tekhn.nauk; ALEKSANDROVICH, G.V., inzh.

Investigating the drying of milled peat in an air and steam dryer.
Trudy NIIMesttoppoma no.17:135-170 '62. (MIRA 16:5)
(Peat--Drying)

FROYSHETER, G.B., kand. tekhn. nauk

Urgent problems in peat briquet manufacture. Torf. prom. 40 no.4:
28-29 '63. (MIRA 16:10)

1. Nauchno-issledovatel'skiy institut mestnoy i toplivnoy
promyshlennosti UkrSSR.
(Peat industry) (Briquets(Fuel))

FROYSHETER, G.B., kand. tekhn. nauk

Increasing the operative efficiency of the pneumatic steam-
and-water dryers in peat briquet plants. Torf. prom. 40 no.7:27 '63.
(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut mestnoy i toplivnoy
promyshlennosti Ukrainskogo soveta narodnogo khozyaystva.

FRUCHT A. Igiena noului nascut Hygiene of the newborn Revista tinerelor medicale,
Bucharest 1949, 1/2 (162-163)

The author suggests a series of valuable precepts to be followed by nurses and mothers.

Maghera - Bucharest (IV, 7)

So: Medical Microbiology and Hygiene, Section IV, Vol.3, No 1-6

FRUCHTER, J.

DINULESCU, G.; STOENESCU, D.; MANOIU, I.; RAUCHBACH, C.; DRAGOIU,
I.; DONCIU, Iv.; ~~FRUCHTER, J.~~

Study of piperazine as an anthelmintic in ascariasis,
ankylostomiasis and trichuriasis in dogs. Stud. cercet. inframicrobiol
Bucur. 6 no. 1-2:285-298. Jan-June 55.

(HELMINTH INFECTIONS

in dogs, ther., piperazine)

(PIPERAZINES, ther. use

helminth infect. in dogs)

(DOGS, diseases

helminth infect., ther., piperazine)

(HOOKWORM INFECTION

in dogs, ther., piperazine)

VASILIEV, R.; SCINTEE, V.; FRUCHTER, J.

Determination in waterless medium of the pyramidon and veronal
in the "Veropirin" product. Rev chimie Min petr 13 no.3:170-
171 Mr '62.

FRUCHTER, J.

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9
The complexometric determination of phosphates and hexaphosphate. R. Vasiliev, Vera Schintz, Elena Sisman, J. Fruchter, M. Jecu, I. Chialda, and Gr. Anaslasescu (Inst. Cercetari Farm. si controlul med., Bucharest, Romania). *Lucrurile prezentate conf. natl. farm., Bucharest* 1958, 180-7. —A new complexometric method is proposed for the indirect detn. of the phosphates of Na, K, Ca, Mg, and codeine, as well as of hexaphosphate, by pptn. with Bi nitrate in a medium of dil. HNO₃ and titration of the excess of Bi nitrate with Complexon III, with Pyrocatechol Violet used as a specific indicator. The pptn. of the Bi nitrate is quant. and thus the soly. of the ppt. does not affect the results.
Felicitas D. Goodman

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FRUCHTER, J.

1. "Comparative Detection of Venereal" Prof. Ch. GORDON, from the University of Edinburgh, from the "EDINBURGH JOURNAL OF MEDICINE" 1897, Vol. 1, No. 1, pp. 1-10.
2. "Comparative Study of the Methods of Identifying Venereal" Prof. Ch. GORDON, from the University of Edinburgh, from the "EDINBURGH JOURNAL OF MEDICINE" 1897, Vol. 1, No. 1, pp. 1-10.
3. "Study of Surfactant Oil Used in Industrial Solutions" (see 11). Prof. V. GIOVARELLA, from Siena Univ., from the "RIVISTA DI SCIENZE E LETTERE" 1900, Vol. 1, No. 1, pp. 1-10.
4. "Study of Surfactant Oil Used in Industrial Solutions" (see 11). Prof. V. GIOVARELLA, from Siena Univ., from the "RIVISTA DI SCIENZE E LETTERE" 1900, Vol. 1, No. 1, pp. 1-10.
5. "Detection in Non-Alcoholic" Prof. Ch. GORDON, from the University of Edinburgh, from the "EDINBURGH JOURNAL OF MEDICINE" 1897, Vol. 1, No. 1, pp. 1-10.
6. "Detection in the Case of Venereal" Prof. Ch. GORDON, from the University of Edinburgh, from the "EDINBURGH JOURNAL OF MEDICINE" 1897, Vol. 1, No. 1, pp. 1-10.

VASILIEV, R.; SCINTEE, V.; CHIALDA, I.; SISMAN, E.; FRUCHTER, J.;
JECU, M.

Identification and determination of antipyrine pyramidon, and
novalgin in the mixtures which contain these three components.
Rev chimie Min petr 13 no.12:759-760 D '62.

1. Institutul pentru controlul de stat al medicamentelor si
cercetari farmaceutice.

VASILIEV, R.; FRUCHTER, J.; JECU, M.

Determination of piperidine in nonaqueous medium. Rev chimie Min
petr 14 no.5:302 My '63.

1. Institutul pentru controlul de stat al medicamentelor si
cercetari farmaceutice.

VASILIEV, R.; FRUCHTER, J.; JECU, M.

Determination of cyclohexylamine in a nonaqueous medium. Rev
chimie Min petr 14 no.5:303 My '63.

1. Institutul pentru controlul de stat al medicamentelor si
cercetari farmaceutice.

L 31451-66

ACC NR: AP6023181

SOURCE CODE: RU/0003/65/016/002/0104/0105

AUTHOR: Vasiliev, R.; Fruchter, J.; Jocu, M.

ORG: Institute for the State Control of Drugs and Pharmaceutical Research (Institutul pentru controlul de stat al medicamentelor si cercetari farmaceutice)

TITLE: New method for the dosage of methadonehydrochloride

SOURCE: Revista de chimie, v. 16, no. 2, 1965, 104-105

TOPIC TAGS: perchloric acid, dioxane, chloroform

ABSTRACT: The authors describe a simple, rapid and precise method for the determination of methadonehydrochloride. The method uses titration in a chloroform medium with a titrated solution of perchloric acid in dioxane, using methanyl yellow as indicator. To remove interfering Cl ions, preliminary treatment with mercuric acetate is used. Orig. art. has: 1 figure and 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: none

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0915

1392

L 34902-66

ACC NR: AP6026621

SOURCE CODE: RU/0003/65/016/005/0293/0294

AUTHOR: Vasiliev, R.; Fruchter, J.; Jocu, M.

ORG: Institute for the State Control of Drugs and Pharmaceutical Research (Institutul pentru controlul de stat al medicamentelor si cercetari farmaceutice)

TITLE: Determination in nonaqueous medium of pethidine hydrochloride in the presence of metanil yellow indicator

SOURCE: Revista de chimie, v. 16, no. 5, 1965, 293-294

TOPIC TAGS: quantitative analysis, potentiometer, chloroform, perchloric acid, dioxane, pharmacology

ABSTRACT: The authors describe a method for the determination of pethidine hydrochloride which is also applicable to the injectable solution. It involves dissolving the substance in chloroform and titration with perchloric acid in dioxane solution, using metanil yellow as indicator. The precision of the method was confirmed by comparing the results with those obtained by potentiometric determination. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: none

Card 1/1 ULR

0916

2348

FRUCHTER, M.

RUMANIA/Chemical Technology - Chemical Products and Their I-9
Applications-- Electrochemical
Manufacturing. Electrodeposition.
Chemical Sources of Electrical Current.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8906

Author : Scumpu, M., and Fruchter, M.

Inst :
Title : A Method for the Determination of the Concentration of Copper Based on the Determination of the Specific Gravity of the Electrolyte Solution Used in the Refining of the Copper.

Orig Pub : Rev. chim., 1956, 7, No 3, 169-170

Abstract : An empirical formula is proposed for the determination of the concentration of Cu in the electrolyte solution used for its refining: $D = mc + n$, where D is the specific

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W. FRUCHTER

Distr: 4E2c

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Preparation of a lead-sodium alloy by electrolysis of molten sodium hydroxide. Al. Turassy and M. Fruchter. *Rev. chim.* (Bucharest) 9, 203-6 (1958) (English summary). Electrolysis with agitation at 350-70° of molten NaOH-(<30%)Na₂CO₃ in a cell by using Ni anodes (2.8 sq. cm.) and molten Pb cathode (104 sq. cm.) gave Pb-Na alloys with various Na contents depending on conditions. In a continuous pilot cell operated to produce an alloy contg. 5% Na, the c.d. was about 80 amp./sq. cm., the power consumption was 12.5 kw./kg. Na, and the consumption of NaOH and Na₂CO₃ was 2.25 kg. of each kg. of Na.

GARY GERARD

FRUCHTER, M.

SCIENCE

Periodicals: REVISTA DE CHIMIE Vol.9, no. 9, Sept. 1958

FRUCHTER, M. Test to introduce alkaline desantimoniation of raw lead in Rumania. P. 552

Monthly List of East European Accessions (EEAI) IC, Vol. 8, No. 2,
February 1959, Unclass.

18.12.10 2408 1413 4016 27002 R/003/61/012/003/003/004
D238/D302

AUTHORS: Antonescu, A., and Fruchter, M. Engineers

TITLE: Electrothermal production of Al-Si alloy from indigenous kaolin

PERIODICAL: Revista de chimie, v. 12, no. 3, 1961, 150-156

TEXT: The authors investigated the structural, technological and economic factors affecting the electrothermal production of Al-Si alloy from indigenous kaolin and charcoal. In doing so, they had in view the subsequent separation of aluminum from this alloy by processes which have been recently studied. The experimental results were considered satisfactory in order to start production of the alloy on a semi-industrial scale. A review of the thermodynamics and kinetics of the specific reactions involved indicated the following preliminary requirements. (a) Rapid heating of the charge up to 2100°C, requiring a furnace with high specific power input; (b) very pure raw materials;

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Electrothermal production...

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(c) effectuating the reduction in the solid and gaseous phases only;
 (d) speedy removal of the alloy and gases from the reaction zone; and
 (e) a carefully proportionated and granulated charge. The 60 KW furnace was operated with a 380 V single phase transformer. The maximum intensity was 600A at 35-40V. The volume of the working space was calculated from the energy consumption between two consecutive drainings₃, corresponding to a production of 6.8 kg of alloy; a volume of 46 dm³ was obtained. The stagnation period was 2.25 hours. The bottom electrode, made of graphitized carbon, had a current density of 2.27A/cm²; the corresponding figure for the top electrode was 20.4 A/Cm² and the medium - 6.85 A/cm². The specific productivity was 940Kg/m²/24 hours. Charges were made of washed kaolin (SiO₂, 52.61%; Al₂O₃, 33.67%; Fe₂O₃, 1.32%; moisture 11.11% etc.) and charcoal (C₁ 79.63%; ashes. 5.35%; volatile matter, 15.04%, etc.) The optimum charge was made with 1% of C in excess of the theoretical requirements. The components were dried, ground, sieved, mixed and pelletised (using 30% of H₂O b.w.). The

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D238/D302

Electrothermal production...

optimum tension and current intensity were found as 40V and 1600 A, respectively. A rapid method for analysis of the alloy was elaborated. The sample is treated at 900°C with dry, gaseous HCl to chlorinate the metals, which are then separated as chlorides and analyzed by known methods. The washed residue is then oxidized at 1000°C and CO₂ is trapped by KOH solution, giving the amount of free carbon. Next, PbO is added and another oxidation at 1000°C destroys the carbides. Si is determined by difference. The power consumption per unit of product is shown to be a function of furnace power. A specific consumption of 18.6-22.6 kWh/Kg alloy was attained at 40V and 1600A. This figure is identical with the specific consumption for a 250kWh-furnace, given by literature. The consumption of kaolin, charcoal and electrodes per Kg of alloy was 3.63, 1.68 and 0.05 Kg. respectively. (8) Yields of 56 to 80% were recorded. Most of the losses are attributed to volatilization of a.c.; the losses were exceedingly high due to the relatively wide space between electrodes and walls. Alloys of the following composition were produced. Al, 34-36%; Si 56-57%; Fe 4-7%; Ca, traces;

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Electrothermal production...

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carbides 2-3%; oxides 0.3%. The high actual ratio of Si to Al is attributed to volatilization of the latter; the high Fe content is probably due to contamination from working tools and from the wall bricks. The carbide content is well within the permissible limit of 6%. The cost of the combined production of Si and Al by this process is comparable with that of producing these elements separately by the older methods; i.e. Al from bauxite and Si from quartz. There are 2 figures and 4 tables. X

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27003

R/003/61/012/009/002/008
D019/D105

AUTHORS: Moscovici, Ana; Balaeş, Elena; Teodorescu, Caliopi and Fruchter, M.

TITLE: Extracting germanium concentrate from the ammonia liquor of coking plants

PERIODICAL: Revista de Chimie, v. 12, no. 9, 1961, 508-511

TEXT: The article describes experiments conducted on the precipitation of germanium with tannin from ammonia liquor. Precipitation was achieved by mixing 1-1.5 lit of ammonia liquor with a solution of 5% tannin and 17% FeCl_3 . The mixture was agitated for 10 minutes and decanted. After 24 hours, 3/4 of the total quantity was syphoned and analyzed to establish the quantity of non-precipitated germanium. A 90% precipitation yield at a concentration of the final solution below 0.1 g Ge/cu m was obtained by heating the solution to 80°C and simultaneously reducing the pH value to 2-2.5 and adding 50 g tannin/g Ge. Due to the very low percentage of germanium concentration in ammonia liquor, heating to 80°C and reducing the pH are no longer economical. Thus, a series of experiments have been conducted by varying the precipitation factors. The solutions used had an

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Extracting germanium concentrate 27003

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initial concentration of 14 kg NH_3 /cu m and 2.6 g Ge/cu m at pH 8. Precipitation was carried out at 20°C, with 100 g tannin and 200 g Fe^{3+} per g of Ge, in a solution with pH 8. It was found that within the initial concentration of 0.17-2.6 g Ge/cu m, the efficiency of tannin, i.e. the precipitation yield, was practically constant, with the final solutions reaching a concentration of <0.1 g Ge/cu m. The precipitates contained ~ 200-300 g/t Ge, but after calcining the content increased to 600-700 g/t. The precipitation yield of germanium did not exceed 60% when 100-200 g tannin/g Ge were added. To determine the size of precipitation granules, two series of tests were carried out. One series of tests which was carried out by filtering a mixture of tannin and ammonia liquor with a no. 3 Gooch filter and filter paper, established the variation in size as dependent on time. After 120 hours of agitation, the total germanium was included in granules, the size of which exceeded 20 - 30 μ . The second series of tests was carried out by agitating the mixture of ammonia liquor and tannin for only 10 minutes, followed by decantation. After 72 hours the granules showed a yield of 65% while with continuous agitation for 72 hours the yield was ~ 80%. Coagulation and separation of particles took a little less time in case of con-

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27003

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D019/D105

Extracting germanium concentrate

tinuous agitation. By centrifugation for 15 minutes at 1,700 rpm, the result was similar to that achieved with 5 days of mechanical agitation or with over 7 days of decantation. The separation of germanium amounted to 80% in case of analysis of a clear solution obtained in a test tube by centrifugation, and to 98% when the solution was filtered prior to the analysis. Precipitation with tannin of germanium from ammonia liquor includes (a) partial coprecipitation of ferric ions and germanium in an alkaline medium and their immediate separation once the reaction has begun and (b) colloidal-type reaction of tannin with germanium, leading to the formation of insoluble compounds. Conclusions: (1) addition of 100 g of tannin and 200 g of iron/g Ge from ammonia liquor is sufficient; (2) a filter of particular fineness should be used in separating the precipitate; (3) solutions should be mixed as thoroughly as possible; (4) separation of ~ 70-80% of germanium may be achieved within 1-2 hours by mechanical agitation, followed by filtering through a 20-30- μ filter; (5) products containing tannin may be used instead of pure tannin and (6) the average composition of germanium precipitates obtained from ammonia liquor with a content of ~ 1 g/Ge cu m is: C, 16.7%, Pb, 0.021%, Cu, 0.01%, Zn, 0.95%, SiO₂, 0.39%, Al₂O₃, 2.02%, Fe, 15.3% and Ge, 0.02%. There are 4 figures, 3 tables and 6 references: 3 Soviet-

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Extracting germanium concentrate27003

R/003/61/012/009/002/008
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bloc, 2 non-Soviet-bloc and 1 unidentified. The reference to the English-language publication reads as follows: S.Schweller and A. Powel: The Analysis of Mineral and Ores of the Rare Elements, London, 1955, p. 8.

Card 4/4

FRUCHTER, M.; SCUMPU, Maria

Sulfatization of volatile dusts by means of iron sulfate in nonferrous metallurgy. Rev chimie Min petr 14 no.7:381-384 J1 '63.

TURASSY, A.; TUTELEA, A.; MERCEA, V.; FRUCHTER, M.

Continuous decoppering of rough lead in electric furnaces.
Rev chimie Min petr 14 no.8:455-460 Ag '63.

FRUCHTER, M.

"Extractive metallurgy of aluminum" by Gary Gerard, P.T.
Stroup. Reviewed by M. Fruchter. Studii cerc metalurgie
9 no.2:402-404 '64.

FRUCHTER, M.

Economic aspects of the utilization of bismuth in
crude lead refining. Rev chimie Min petr 15 no. 1: 29-34
Ja '64.

L 29886-66 EWP(t)/ETI IJP(c) JD

ACC NR: AF6020347

SOURCE CODE: RU/0003/65/016/008/0352/0358

AUTHOR: Mercea, Viorica; Turassy, Al.; Jaks, I.; Fruchter, M.

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ORG: none

TITLE: Antimony extraction from the anodic mud obtained from the electrolytic refining of decoppered crude lead₂₁

SOURCE: Revista de chimie, v. 16, no. 8, 1965, 352-358

TOPIC TAGS: antimony, metal extracting, electrolytic refining, lead

ABSTRACT: The authors describe a method for the electrolytic processing of the anodic muds resulting from the electrolytic refining of crude lead. The electrolyte consists of antimony fluoride and buffers, and the cell of the diaphragm type -- pure antimony is deposited at the cathode. The antimony extraction yield is over 90 percent, and the remaining metals are easily extractable from the secondary mud. Orig. art. has: 2 figures and 7 tables. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 11 / SUBM DATE: none

Card 1/1

UDC: 669.753.7:669.447.004.8

GHIPS, Melania; SANDULESCU, D.; HERSCOVICI, J.; FIEROIU, Victoria; SFINTESCU,
C.; FRUCHTER, Nuti

Documentation methods for technical and scientific chemical
research. Rev chimie Min petr 15 no.12:745-753, D '64.

1. Submitted April, 1964.

Fruchter, S. ; Holgiu, O. ; Demitrescu, A.

Notes on serpentines in the Southern Banat and the possibilities of their utilization. p. 391.

Academia Republicii Populare Romine. STUDII SI CERSETARI DE METALURGIE.
Bucuresti, Rumania. Vol. 4, No. 3, 1959.

Monthly List of East European Accessions (EEAL) LC Vol. 9, No. 2, January 1960

Uncl.

BRANINSKI, A.I.; KATHREIN, A.; IONESCU, C. St.; FRUCHTER, S.

Transformations and reactions of marine magnesum hysroxide
in the presence of various mineralizers and fusing agents
during its calcination and sintering. Studii cerc metalurgie
6 no. 3:315-339 '61

SOFRONI, L.; COSNEANU, C.; NICOLAIU, E.; FRUCHTER, S.

Contents of gases and nonmetallic inclusions in indigenous crude iron.
Studii cerc metalurgie 7 no.1:73-87 '62

1. Membru al Comitetului de redactie si redactor responsabil adjunct,
"Studii si cercetari de metalurgie" (for Sofroni).

NICOLOIU, E.; FRUCHTER, S.

Determination of the stable, nonmetallic inclusions in gray
cast irons. Metalurgia constr mas 14 no.12:1125-1129 D '62.

CARNARU, Stela; FRUCHTER, Z.

Correlations between so-called non-osteogenic fibroma and certain fibrous dystrophies of the bone. Rumanian M Rev. no.2:8-11 Ap-Je '60.

1. This work was carried out in the "Gr. Alexandrescu" Hospital for Children.

(FIBROMA case reports) (BONE AND BONES neoplasms)
(BONE DISEASES diagnosis)

FRUCHTER, Z., dr.; SPODHNE, M., dr.; MEACHEDOU, L., m.

Hypertrophic pyloric stenosis. Current status of radiodiagnosis.
Pediatría (Bucur) 14, no.1:73-76 Ja-F'65.

1. Lucrare efectuată în Serviciul de radiologie, Spitalul clinic
de copii al Raionului "30 Decembrie" (director: conf. V. Ionescu-
Coman).

FRUDINSKIY, PG.

SURKOV, S. K. Eng., VASIL'EV, P. A. Eng., LITKIN, E. YU. Eng., NAYDIS, V. A. Eng.,
KULAKOV, A. A. Eng., SOXCLOV, M. M. Docent, FRUDINSKIY, P. G. Prof.

Electric Power Distribution

Electric power supply for industrial enterprises. Elektrichstvo No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

1701
1701

I.V. BESHKOVA, "I.I. NIKOLSKI and N.I. KUMAROV, Laboratory of the Pharmacology and Biochemistry of Medicinally Active Substances of the Institute of Evolutionary Physiology named after I.M. Sechenov, of the Academy of Sciences of the U.S.S.R. (original author not stated.)

"Physiological Effects of Organic Phosphate Compounds. Relation Between the Chemical Structure and the Pharmacological Activity.

Trudy, Gosobshchestva Farmatsii, Vol. 11, No. 9, Sept. 1964, pp. 471-482.

Abstract: A detailed review of the results of various experiments conducted on presumably unpublished observations included in some early or publications. Consideration of the strictly in vitro biochemical and the in vivo pharmacological effects. 100-200 diagrams, structural formulae, tables: 16 Soviet and 24 foreign references.

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ZEJMALOVA, E.V.; MICHELSON, M.J.; FRUMENTOV, N.K.

The physiological action of organic phosphorus compounds. The relation between chemical structure and pharmacological action. Cesk. farm. 11 no.9:471-482 N '62.

1. Laborator farmakologie a biochemie biologicky aktivnich latek Ustavu evolucni fyziologie I.M. Secenova, Akademie ved SSSR.
(PHOSPHORUS POISONS, ORGANIC) (CHOLINESTERASE)

VASILESCU, Gh.; VAMVU, V.; FRUGINA, E.

Hydrogeological considerations on the iron ore deposit in the
Palazu Mare zone. Dari seama sed 49 pt.2:245-258 '61-'62[publ. '64].

1. Submitted April 6, 1962.

FRÜHAUF, K. (Berlin-Buch, Karower Str. 11)

Psychic changes in adolescents with brain tumors. *Activ. nerv. sup.*
(Praha) 7 no.2:192-193 '65

1. Neurosurgical Clinic, Berlin-Buch.

FRUHAUF, Rene

Importance of general technical development. Tech praca
15 no.2:120-122 F '63.

FRUHAUPOWA, J.

Investigation on antibacterial and therapeutic properties
of penicillin in scarlet fever and attempt to shorten
hospitalization from 6 weeks to 10 days. *Pediat. polska* 26
no.2:137-153 Feb 1951. (CINL 21:1)

FRUHAUFOWA, J.

Results of streptomycin and paraaminosalicylic acid therapy of tuberculosis in children. *Pediat. polska* 27 no. 6:681-694 June 1952.
(CLML 22:4)

1. Of the Clinic of Pediatric Infectious Diseases (Head--Prof. J. Bogdanowicz, M. D.) of the Pediatric Department of Warsaw Medical Academy.

BURACZEWSKA, Maria; FRUHAUFOWA, Jadwiga; STANCZYKOWA, Regina

Investigations on the presence of Mycobacterium tuberculosis in cerebrospinal fluid of tuberculous children. Gruzlica 24 no.2:107-112 Feb 56.

1. Z Kliniki Chorob Zakaznych Wiekcu Dzieciecego--Kierownik: prof. dr. med. J. Bogdanowicz. Z Zakladu Mikrobiologii Instytutu Gruzlicy--Kierownik: doc. dr. M. Buraczewska. Z Zakladu Anatomii Patologicznej A.M.--Kierownik: prof. dr. med. L. Paszkiewics, Warszawa, Plocka 26.

(TUBERCULOSIS, in inf. and child.

isolation of M. tuberc. in CSF)

(CEREBROSPINAL FLUID, bacteriol.

M. tuberc. isolation in tuberc. in child)

(MYCOBACTERIUM TUBERCULOSIS

in CSF, isolation in tuberc. in child)

FRUHAUFOWA, Jadwiga

Complications after smallpox vaccination in Poland during 1958 and 1959. *Pediatr* pol 36 no.10:1047-1054 0 '61.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie
Kierownik: prof. dr med. J. Bogdanowicz.
(SMALLPOX immunol) (VACCINATION compl)

~~CONFIDENTIAL~~
~~Source, given name~~

Country: Czechoslovakia

Academic Degrees: MD

Affiliation: Director of Public Health Institute (Krajsky ustav narodniho zdravi) of
North Moravia Kraj (Severomoravsky kraj), in Ostrava

Source: Prague, Ceskoslovenska Mygiens, No 4, May 61, rear cover

Data: (Announcement) "Applications Are Invited to Fill a Vacancy"

Country : CZECHOSLOVAKIA
 Category : Microbiology-Microbes Pathogenic for Man and Animal
 Abs. Jour : Ref Zhur - Biol., No.19, 1958, 35245
 Author : Malik, O., Pruhbauer, Z., Zastera, M.
 Institut. : -
 Title : New Reservoirs of *L. grippotyphosa*
 Ustav epidemiologie a mikrobiologie v Praze, reditel Prof. Karel Raska
 Orig Pub. : Ceskosl. Epidemiol., Mikrobiol., Imunol., 1957,
 Vol.6, No.6, 361-364
 Abstract : In northwestern Czechoslovakia leptospira were isolated from the kidneys not only of the field mouse *Microtus arvalis* but also from the kidneys of *M. agrestis*, *Clethrionomys glareolus*, *Apodemus flavicollis*, *Apodemus sylvaticus* and *Mus musculus*. All isolated strains were determined as *Leptospira grippotyphosa*. Discovery of the latter in *Mus musculus* compels the author to the idea that infection with these leptospira may occur not only in field mice but also under domestic conditions. The same pertains to the above-mentioned species of mouse-like rodents, which migrate in the winter to human habitation sites. - Z.A.Yakubovich
 Card: 1/1

FRUHBAUEROVA, O;KRALOVE, H.

Prevention and social-health institutions in control of child mortality. Zdravot. rev. 25 no.7:185-190 July 1950. (CML 20:1)

HAJDUK, A.; FRUHBANEROVA, V.

Analysis of mortality of prematures in Ostrava County in 1955-1956.
Cesk. pediat. 13 no.9:836-843 5 Oct 58.

1. Kojenecky ustav MUDr. E. Lukasove v Ostrave, prednostka MUDr. O.
Fruhbanerova Kojencky ustav v Opave, prednostka MUDr. A. Hajduk. A. H.,
Opava, Nakladni 31. O. F., Ostava V, Jedlickova 3.

(INFANT MORTALITY

premature inf. in Czech. (Cz))

WEINBERGER-PREDOU, St., ing.; FRUHN, H., ing.

Complete utilization of production capacity at the
"Octombrie rosu" spinning mills, Ghimbav. Ind text Rum no.5:259-260
My '64.

1. "Octombrie rosu" Spinning Mills, Ghimbav.

FRUKHSHEYN, R.I.
RUDOV, R.A.; FRUKHSHEYN, R.I.

Use of fabrics at the Smirnova-Lastochkina Factory. Leg.prom. 17
no.8:46-48 Ag '57. (MIRA 10:10)

1.Glavnyy inzhener Kiyevskoy [tekstil'noy] fabriki im.
Smirnova-Lastochkina (for Rudov). 2.Nachal'nik oddela truda
i zarabotnoy platy Kiyevskoy [tekstil'noy] fabriki im. Smirnova-
Lastochkina (for Frukhshteyn).
(Kiev--Clothing industry)
(Garment cutting)

KOGAN, S.Ye.; FRUKHSHTYIN, R.I. (Kiyev)

Practices in the organization of the wage payment system for workers
in clothing enterprises. Shvein.prom. no.2:7-9 Mr-Ap '61.

(MIRA 14:4)

(Clothing industry) (Wage payment systems)

FRANKHSHTEYN, R. I.

Organization of the multiple-type section assembly line with cycle
starting for the manufacture of better quality light coats for men.
Leh.prom. no.3:67-71 Je 7 Ag '62. (MIRA 16:2)

1. Kiyevskaya shveytnaya fabrika im. Smirnova-Lastochkina.
(Kiev--Clothing industry) (Assembly-line methods)

PESTEKHA, A.S. (Kiyev); FRUKHSHTEYN, R.I. (Kiyev)

Standardization of norms and work division systems.

Shvein. prom. no.6:11-14 N-D '63. (MIRA 17:2)

FRUKHT, A.I. (Khar'kov)

Three-dimensional planning as a factor in providing better air for
workers in chemical plants. Gig. truda i prof.zab. 2 no.1:57-60
Ja-V '58. (MIRA 11-3)

1. Institut gigiyeny truda i profzabolevaniy.
(CHEMICAL PLANTS--HEATING AND VENTILATION)

IL'INA, N.S.; FRUKHT, D.D.
New data on the geology of the Gorodetsko-Koverninskaya zone.
Trudy VNIIGI no.36:149-155 '63.
(MIRA 17:9)

APPROVED FOR RELEASE

FRUKHT, D.L.

Geological structure of the lower Sura Basin. Trudy VNIGNI no.4:
62-77 '54. (MLRA 10:4)
(Sura Valley--Geology, Stratigraphic)

LYUTKEVICH, Ye.M.; FRUKHT, D.L.

Probable location of the covered crest of the Russian Platform
base in Gorkiy Province. Dokl.AN SSSR 95 no.2:357-359 Mr '54.
(MLRA 7:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy
neftyanoy institut.
(Russian Platform--Geology) (Geology--Russian Platform)

IL'INA, N.S.; YELINA, L.M.; FRUKHT, D.L.

Geological structure of Gorkiy Province and adjacent regions.
Trudy VNIGNI no.6:3-11 '55. (MLRA 9:11)
(Gorkiy Province--Geology, Stratigraphic)
(Gorkiy Province--Coal geology)

GOROSHEKOVA, V.A.,; FRUKHT, D.L.

Lower Triassic sediments in the Volga Valley near Kineshma and
Kostroma, in the Vetluga Basin, and along the upper Kama and Vyatka.
Geol. nefti Supplement to no. 7:65-68 '58 (MIRA 11:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy
neftyanoy institut.

(Geology, Stratigraphic)

FRUKHT, D.L.; SAZONOVA, I.G.

Triassic sediments. Trudy VNIGNI no. 10:60-67 '58. (MIRA 14:5)
(Russian Platform--Geology, Stratigraphic)

VESELOVSKAYA, M.M.; YELINA, L.M.; IL'INA, N.S.; KARASEV, M.S.; SOKOLOVA,
L.I.; FILIPPOVA, M.F.; FRUKHT, D.L., kurator

Alatyr key well. Trudy VNIGNI no.26:113-175 '60. (MIRA 14:1)
(Russian Platform--Petroleum geology)

FRUENT, D.L.

Traissic sediments in the central areas of the Russian Platform.
Trudy VNIGNI no.29:76-80 vol. 1 1980. (MIRA 14:7)
(Russian Platform--Geology, Stratigraphic)

IL'INA, N.S.; PRUKHT, D.L.

New data on eruptive processes in the central regions of the
Russian Platform. Dokl. AN SSSR 143 no.5:1163-1165 Ap '62.
(MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy
neftyanoy institut. Predstavleno akademikom N.M.Strakhovym.
(Russian Platform--Geology, Stratigraphic)

IL'INA, N.S.; FRUKHT, D.L.

Distribution of volcanic rocks in the trans-Volga portion
of Gorkiy Province. Dokl. AN SSSR 153 no.4:906-908 D '63.

(MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy
neftyanoy institut. Predstavleno akademikom D.V. Nalivkinym.

IL'INA, N.S.; FRUKHT, D.L.

Oil and gas potential of the Devonian sediments of the central areas of the Russian Platform. Geol. nefti i gaza 8 no.8:44-48 Ag '64. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.

OTTICH, A.F., inzhener; PHUKET, I.A., dotsent.

Light effects of olerestories equipped with wind deflectors. Stroi.prom.
31 no.6:21-22 Je '53. (MLRA 6:7)
(Roofs) (Factories--Heating and ventilation)

FRUKHT, I.A., dots., kand.tekhn.nauk; LAGUNOV, A.S., kand.tekhn.nauk

Aerodynamic (wind) jump as a means for preventing the blowing into draft chimneys used for ventilation. Izv.vys.ucheb.zav.; energ. no.12: 103-109 D '58. (MIRA 12:3)

1. Khar'kovskiy inzhenerno-stroitel'nyy institut (for Frukht).
2. Khar'kovskiy politekhnicheskoy institut imeni V.I. Lenina (for Lagunov).
(Ventilation)

FRUKHT, I.A.

FRUKHT, I.A.

Water resisting skylights with wind breaking shields. Stroi. prom.
36 no.1:42-43 Ja '58. (MIRA 11:1)

(Skylights)

FRUKHT, L. A.

"Conditions of Approximate Modeling of a Temperature Field
in a Half-Closed Circuit with heat Sources"

Report presented at the Conference on Heat and Mass Transfer.
Minsk, USSR, 5-10 June 61

It is established as a result of experimental investigation that
the condition $Gr \cdot Pr \geq 2.9 \times 10^3$ and the condition of the commensur-
ability of the gravitational and forced air exchange should be
observed when modeling the internal convection on air models.

Kharkov Civil Engineering Institute

ABAKUMOVSKIY, D.D., inzh.; VIKHMAN, Yu.L., inzh.; VODOVOZOV, A.I., inzh.;
ZORIN, R.P., inzh.; IGNATCHENKO, Ye.A., inzh.; LITINSKIY, M.E., inzh.;
SAZONOV, A.I., inzh.; PRITULA, V.A., inzh.; POMAZKOV, S.A., inzh.;
FRUKHTSEYN, L.I., inzh.; SAPOZHNIKOV, N.M., inzh.; NASYUK, A.I., inzh.;
YANKILEV, L.F., inzh.; BASHILOV, M.M., otv. red.; LATINSKIY, M.E., red.;
POLOSINA, A.S., tekhn. red.

[Handbook for builders and assemblers of the petroleum industry]
Spravochnik stroitelia-montazhnika neftianoi promyshlennosti. Mo-
skva, Gostoptekhizdat, 1946. 250 p. (MIRA 15:4)

1. Russia(1923- U.S.S.R. Narodnyy komissariat neftyanoy promysh-
lennosti. Glavnoye upravleniye. 2. Narodnyy komissariat neftyanoy
promyshlennosti SSSR (for all except Bashilov, Latinskiy, Polosina).
(Petroleum industry)

GOTLIIB, F.; NEGUS, N.; SHIREANU, B.; GEORGISCU, M.; IONESCU, I.;
PEZAMOSKA, A.; BRUKHTER, Z.

Surgical therapy of osseous and osteo-articular tuberculosis
in the Children's Surgical and Orthopedic Clinic in Bucharest.
Khirurgia 15 no.2/3:236 '62.

(TUBERCULOSIS OSTEOARTICULAR surg)

OFITSEROV, V.N.; FRUKHTBEYN, M.A.; SAVICH, Yu.P.

Mechanization of the feeding of rags to rag pulp rolls.

Bum.prom. 36 no.4:22 Ap '61.

(MIRA 14:5)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektokonstruktorskiy institut po proyektirovaniyu oborudovaniya dlya tsellyulozno-bumazhnoy promyshlennosti.

(Paper industry—Equipment and supplies)

USIYEVICH, M.A., kand. ekon. nauk; VIDMAR, V.N., kand. ekon. nauk;
 STUPOV, A.D., kand. sel'khoz. nauk; STARODUBROVSKAYA, V.N.,
 kand. ekon. nauk; STOROZHEV, V.I., kand. ist. nauk; RUDAKOV,
 Ye.V., kand. ekon. nauk; KIRANOV, P., prof.; KHORVAT, L.
 [Horvat, L.], kand. ekon. nauk; KROMM, K., doktor; FRUKK, Kh.
 [Frukk, H.], doktor; SHMIDT, V. [Schmidt, V.], prof., doktor;
 TEPIKHT, Ye. [Tepicht, E.], prof.; NIK, S. [Nic, S.], kand.
 ekon. nauk; DUMITRIY, D. [Dumitro, D.]; SVOBODA, K., kand.
 ekon. nauk; LEPNIKOVA, Ye., red.; KIRSANOVA, I., mladshiy red.;
 NOGINA, N., tekhn. red.

[Socialist reorganizations in the agriculture of the European
 people's democracies] Sotsialisticheskie preobrazovaniya v sel'-
 skom khoziaistve evropeiskikh stran narodnoi demokratii. Moskva,
 Sotsekgiz, 1963. 334 p. (MIRA 16:7)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisti-
 cheskoy sistemy. 2. Institut ekonomiki mirovoy sotsialistich-
 eskoy sistemy AN SSSR (for Usiyevich, Vidmar, Stupov,
 Starodubrovskaya, Storozhev, Rudakov).
 (Europe, Eastern--Agriculture, Cooperative)

IL'INA, N.S.; NIKISHIN, V.I.; FRUKT, D.L.;

Possibility of finding oil in the terrigenous Devonian in the
region of Gorkiy city. Neftegaz. geol. i geofiz. no.10:31-35 '63.
(MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy
neftyanoy institut i Institut geologii i razrabotki goryuchikh
iskopayemykh AN SSSR.

KAS'YANOV, V.M.; FRUKTOV, A.L.

Effect of forces of auditory signal on the rate of motor functions
in man. Fiziol. zh. SSSR 38 no.6:681-688 Nov-Dec 1952. (CML 23:4)

1. Department of Physiology and Department of Light Athletics of
the State Central Order of Lenin Institute of Physical Culture imeni
I. V. Stalin, Moscow.

Pruktoy, A.L.

Change in man's motor function as a result of a disturbed balance between the cortical processes of stimulation and inhibition. V.M. Kas'akov, A.L. Pruktoy. Teor.i ;rak. fizkul. 16 no.3:184-191 Ir '53.

MIKHAYLOV, N.I.; FRUKTOV, V.V., inzhener, retsenzent.

[Technology of metalworking] Tekhnologiya mekhanicheskoi obrabotki.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-
ry, 1954. 253 p. (MLRA 7:7)
(Machine-shop practice) (Metal cutting)

FRUKTOV, V.V.

SHMELEV, A.Ye., prof.; BELOUSOV, A.P., dotsent; KUDRYAVINA, T.A., kand.
tekhn.nauk; FRUKTOV, V.V., inzh.; BOGATYREVA, A.V., inzh.

Introducing standard technological processes for machining parts
in conditions of small-lot production. Trudy MIEI no.7:5-19 '57.
(MIRA 10:12)

(Metal cutting) (Machine-shop practice)

FRUKTOV, V.V.
FRUKTOV, V.V.

Technological characteristics of manufacturing machinetool parts
at the S. Orshonikidze Machine-Tool Plant. Stan. i instr. 28
no.12:4-5 D '57. (MIRA 10:12)
(Machine-tool industry)

SMIRNOV, P.M.; FRUKTOVA, N.I.

Unexchangeable ammonium fixation in soils. Pochvovedenie no.3:83-93
M^r '63. (MIRA 16:3)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya
imeni K.A.Timiryazeva.
(Ammonia as fertilizer)

FRUK TOVA, Ye. P.

The thianthrene series. I. Thianthrene β -sulfonic acid disulfone. V. V. Kozlov, B. P. Fruktova and O. M. Shemyakina. *J. Gen. Chem.* (U. S. S. R.) 10, 1077-89 (1940). -- S_2Cl_2 , C_6H_6 and $AlCl_3$ give 78.5% thianthrene which is oxidized by CrO_3 in glacial HOAc to give 82% thianthrene disulfone (I), m. 321°. This is very inert toward sulfonating agents, and only when heated for 2 hrs. at 140° with a large excess of 82% oleum in a sealed tube does it give 58% of a monosulfonic acid, isolated as the K salt (II). No other compds. can be obtained. The NH₄, Mg, Na, K, Cu, Ba, Zn, Al, Fe, Pb and Ag salts are described. When II is refluxed for 5 hrs. with $PdCl_2$ at 100° in the presence of a little NH_4Cl , it gives 77% of the sulfonyl chloride (III), decmpo. 191°. When III is heated with H₂O in a sealed tube, it gives a very hygroscopic acid. III and NH₄ give the corresponding acid amide, m. 178°. When II is ground with $PdCl_2$ and wano NH_4Cl and heated for 5 hrs. at 180°, it gives 78% of a chlorothianthrene disulfone, m. 120°, which is identical with the compd. prepd. by oxidizing β -chlorothianthrene with CrO_3 in HOAc. Fusion of II with NaOH gives PhOH, resorcinol and $p-HOC_6H_4SO_3H$. These facts prove that sulfonation of I occurs in the β -position. H. M. L.

Lob. Dyestuffs, Moscow Sci. Res. Inst. in. Mandel'yev

SAIM, A.; SCOURCI, E.; FIERBINZIANOU-FILIMON, M.; FRULING, M.;
NETEDOU, N.S.; RADOVITCH, P.

Is it necessary to use large doses of isoniazid in the treatment
of tuberculosis in children? Probl.tub. 38 no.1:56-60 '60.
(ISONICOTINIC ACID) (TUBERCULOSIS) (MIRA 13:10)

*Specific Reaction for Molybdenum. I. M. Korenman and F. S. Frumkin (*Zhur. Priklad. Khim.*, 1943, 16, 410-419; *Brit. Acc.*, 1943, 63, 23). [In Russian.] 3 c.c. of a 3Mol% solution are mixed with 1 c.c. of HCl (d. 1.19) and 5 drops of a saturated ethyl alcoholic solution of diphenylcarbazide and extracted with 1 c.c. of ether; the ether layer becomes red if the concentration of Mo is $\geq 1:3,000,000$. Much larger amounts of Fe⁺⁺⁺, Cr⁺⁺⁺, Al⁺⁺⁺, Mn⁺⁺, Zn⁺⁺, Cu⁺⁺, Ni⁺⁺, Hg⁺⁺, Pb⁺⁺, Bi⁺⁺⁺, Cu⁺, Cd⁺⁺, Ag⁺, Sb⁺⁺⁺, W⁺⁺⁺, As⁺⁺⁺, PO₄⁺⁺⁺, oxalates, citrates, and tartrates do not interfere. CrO₃⁺ and VO₃⁺ must previously be reduced by means of Na₂SO₃.

430-114 DETALLURGICAL LITERATURE CLASSIFICATION

7

Microcolorimetric determination of nitrites, sulfites, and furfural. I. M. Korenman, P. S. Prun, and A. A. Russkikh (Ind. Hyg. Inst., Gorki, U.S.S.R.). *Zashch. shaya Lab.* 16, 3-7 (1959).—The use of micro-test tubes and micro-pipets permits the determination of as little as 0.01 γ of nitrites (with sulfanilic acid and 1-naphthylamine reaction in the presence of AcOH), 0.1 γ of SO_2 (with fuchsin-formaldehyde) and 0.010 γ of furfural (with PhNH_2 in 80% AcOH).

G. M. Kosolapoff

FRUM, F. S.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

Solubility product of lead hydroxide. I. M. Korenman,
F. S. Frum and V. G. Chetukova. J. Gen. Chem. (U.S.S.R.)
22, 1771-3 (1952) (Engl. translation).—See C.A. 47,
2018c.
H. L. H.

(3)
Chem

9-2-57
JHP

FRUM, F.S.

The determination of the solubility product of aluminum hydroxide. I. M. Korenman, F. S. Frum, and A. I. Kudnova (State Univ. Gorki). *Sbornik Dokl. Obshch. Khim., Akad. Nauk S.S.S.R.* 1, 83-4 (1953).—The soly. product x is obtained by the equation $\log x = \log [Al^{3+}] + 3pH + 3p(H_2O)$. The pH at the point of $Al(OH)_3$ pptn. was detd. by plotting the pH vs. ml. of 0.1N KOH. Over a range of $Al(NO_3)_3$ concns. (0.1–0.03 mol./l.) the value of x was not affected by the concn. The av. value at 25° is $1.2/10^{-10}$.
I. Benecowitz

FRUM, F.S.

6

✓ "Stil'bazo" as reagent for aluminum. I. M. Kozlov-
man, P. S. Frum, and E. K. Karzhentina. *L'chenye Zapiski*
Chim. Akad. Nauk SSSR, 1953, No. 4, 141-3; *Referat. Zhur., Khim.*
1955, No. 017. — Colorimetric detn. of Al with stil'bazo is
possible in 0.1 ml. soln. with a max. error of 11% and an av.
error of approx. 4%. In 1 ml. soln. the limit of sensitivity
is 0.00 γ /ml. Al and in 5-10 ml. soln. the sensitivity is
greater. The presence of 200-300 γ Fe⁺⁺⁺/ml. (assuming
preliminary reduction with ascorbic acid), < 0.01 mg. Cu⁺⁺/
ml., 0.1 mg. Zn/ml., 1 mg. Co⁺⁺/ml., 1 mg. Ni/ml., and 3
mg. Cr⁺⁺⁺/ml. did not interfere. At 0.5-5 γ in 10 ml. of
soln. the optical d. of the soln. did not change for 30-40 min.
after addn. of a pH 5.4 buffer soln. and 0.01% reagent soln.
M. Hosh

PM

FRUM, F. S.

3

YICSR.

Composition and dissociation constant of bis-thiocyanato. F. S. Frum and M. N. Skobina. *Vysheye Zupiski Gor'kovskogo* 1953, No. 24, 135-7; *Referat. Zhur., Khim.* 1954, No. 28060. — The compn. was detd. from measurements of the optical d. of mixts. of 0.23M solns. of $\text{Bi}(\text{NO}_3)_3$ and NH_4CNS taken in various proportions while a const. vol. of the mixt. was maintained. Max. optical d. was observed at a ratio $[\text{Bi}^{+++}]:[\text{CNS}^-] \approx 1:3$. Thus, the formula for Bi thiocyanate is $\text{Bi}(\text{CNS})_3$. The dissocn. const. $K = [\text{Bi}^{+++}][\text{CNS}^-]^3/[\text{Bi}(\text{CNS})_3] = 0.41$. M. Hosh.

met

Solubility product of beryllium hydroxide

SOV/137-59-2-4793

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 2, p 347 (USSR)

AUTHOR: Frum, F. S.

TITLE: Color Reactions for Distinguishing Lanthanum From Cerium (Tsvetnyye reaktsii dlya otlichiya lantana ot tseriya)

PERIODICAL: Tr. po khimii i khim. tekhnologii, 1958, Nr 1, pp 132-133

ABSTRACT: La produces an orange coloring with acid monochrome bordeaux C (I). Ce^{4+} and Ce^{3+} do not produce any color. Detectable minimum of La is 1.5 γ /cc, minimum concentration is 1:660,000. Al, Be, Ca, Ti, Th, UO_2^{2+} , and Fe^{3+} , which also produce a yellow and orange coloring with I, impede the determination. The method is applicable for the colorimetric microtitration of La in dilute solutions of its salts. It is feasible to determine 2 - 10 γ /cc La by the standard-series method with 12.5% maximum error. In the presence of Ce^{3+} galleinphthalein produces a blue or violet color. The detectable minimum is 1/2 γ /cc Ce^{3+} , the minimum concentration is 1:800,000 at pH 11.4. With other pH values the reaction is less sensitive. Phosphates, La (258 γ /cc), and salts of Nd and Pr impede the reaction. The reaction can be used for the quantitative determination of Ce by the standard-series method.

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